

In a talk "Some Unusual Optics" before the Rochester Section, Optical Society of America on January 26, 1964, I should like to include the use of coherent light in photographic enlargers. The material will be organized as follows:

- I. Information transmission as part of enlargers
- II. Optical transfer function as a measure of information transmission properties
- III. Limitations of lens designs and fabrication for small  $f$ /nos.
- IV. Optical transfer function with incoherent and coherent light.  
(Optical schematic indicating spectrum plane)
- V. The penalties of using coherent light
  1. Artifacts produced by imperfect lenses
  2. Artifacts produced by high contrast images (ringing)

The remainder of the talk will be devoted to the fabrication and testing of some unusual optics, lightweight mirrors, and the description of a special instrument vintage '54 - '55 for measuring the optical transfer function of long focal length lenses.